Surface Science 242 (1991) 554–559
North-Holland

Author index

Abramov, A.A., N.V. Abrosimov, V.A. Grazhulis, A.M. Ionov and A.M. Panchenko, LEED and spectroscopic studies of (001) surfaces of Nd_2CuO_4 and $(NdCe)_2CuO_4$ single crystals 242 (1991) 45
Abrosimov, N.V., see Abramov 242 (1991) 45
Achiba, Y., see Mase 242 (1991) 444
Aisaka, T., see Ishii 242 (1991) 250
Aono, M., see Kamiya 242 (1991) 404
Ara, N., see Yoshimura 242 (1991) 18
Avouris, Ph. and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1

Baier, H.-U., see Troost 242 (1991) 324
Batra, I.P., Peierls instability considerations for alkali metal chains on Si(001)-2 × 1 242 (1991) 354
Bennemann, K.-H., see Hübner 242 (1991) 299
Berger, A., see Troost 242 (1991) 324
Blügel, S., see Kobayashi 242 (1991) 349
Bortolani, V., see Celli 242 (1991) 518
Burstein, E., see Jiang 242 (1991) 306

Celli, V., D. Himes, V. Bortolani, G. Santoro, J.P. Toennies and G. Zhang, One-phonon and multiphonon processes in atom–surface scattering 242 (1991) 518
Chabal, Y.J., P. Dumas, P. Guyot-Sionnest and G.S. Higashi, Vibrational dynamics of the ideally H-terminated Si(111) surface 242 (1991) 524
Chihara, H., see Inaba 242 (1991) 202
Cho, K., see Yamazaki 242 (1991) 260
Chuang, T.J., see Schwarzwald 242 (1991) 437

Daimon, H., Y. Tezuka, A. Otaka, N. Kanada, S.K. Lee, S. Ino, H. Namba and H. Kuroda, Two-dimensional photoelectron diffraction patterns by display-type spherical mirror analyzer 242 (1991) 288
Del Sole, R., see Reining 242 (1991) 222
Ding, X.M., T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2 × 4)–c(2 × 8) and $Al_xGa_{1-x}As$(100) surfaces 242 (1991) 284
Ding, Z.-J., see Yoshikawa 242 (1991) 434
Domen, K., see Hara 242 (1991) 459

Dumas, P., see Chabal 242 (1991) 524

Ebina, K., see Kaburagi 242 (1991) 107
Ebina, K. and M. Kaburagi, Three-body interaction between adsorbates 242 (1991) 124
Enta, Y., S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2 × 1, c(4 × 2), 2 × 1–Na and 2 × 2–Ga 242 (1991) 277

Fujima, N., see Yamaguchi 242 (1991) 233
Fujimoto, H., see Tokutaka 242 (1991) 50
Fujita, M., H. Nagayoshi and A. Yoshimori, Electronic structure of the DAS model for the Si(111)7 × 7 reconstructed surface by energy band calculations 242 (1991) 229
Fukuda, T., see Harada 242 (1991) 95
Funabashi, M., T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59

Godfrey, M.J., see Needs 242 (1991) 215
Grazhulis, V.A., see Abramov 242 (1991) 45
Guyot-Sionnest, P., see Chabal 242 (1991) 524

Hagino, M., see Nomura 242 (1991) 166
Hanada, T. and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137
Hanada, T., see Sekine 242 (1991) 508
Hara, M., K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459
Harada, Y., H. Hayashi, S. Masuda, T. Fukuda, N. Sato, S. Kato, K. Kobayashi, H. Kuroda and H. Ozaki, Characterization of organic ultra-thin films by Penning ionization electron spectroscopy during layer-by-layer preparation: TFTCNQ, TMTSF and their charge transfer complex 242 (1991) 95

Surface Science 242 (1991) 554–559
North-Holland

Author index

Abramov, A.A., N.V. Abrosimov, V.A. Grazhulis, A.M. Ionov and A.M. Panchenko, LEED and spectroscopic studies of (001) surfaces of Nd_2CuO_4 and $(NdCe)_2CuO_4$ single crystals 242 (1991) 45
Abrosimov, N.V., see Abramov 242 (1991) 45
Achiba, Y., see Mase 242 (1991) 444
Aisaka, T., see Ishii 242 (1991) 250
Aono, M., see Kamiya 242 (1991) 404
Ara, N., see Yoshimura 242 (1991) 18
Avouris, Ph. and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1

Baier, H.-U., see Troost 242 (1991) 324
Batra, I.P., Peierls instability considerations for alkali metal chains on Si(001)-2 × 1 242 (1991) 354
Bennemann, K.-H., see Hübner 242 (1991) 299
Berger, A., see Troost 242 (1991) 324
Blügel, S., see Kobayashi 242 (1991) 349
Bortolani, V., see Celli 242 (1991) 518
Burstein, E., see Jiang 242 (1991) 306

Celli, V., D. Himes, V. Bortolani, G. Santoro, J.P. Toennies and G. Zhang, One-phonon and multiphonon processes in atom–surface scattering 242 (1991) 518
Chabal, Y.J., P. Dumas, P. Guyot-Sionnest and G.S. Higashi, Vibrational dynamics of the ideally H-terminated Si(111) surface 242 (1991) 524
Chihara, H., see Inaba 242 (1991) 202
Cho, K., see Yamazaki 242 (1991) 260
Chuang, T.J., see Schwarzwald 242 (1991) 437

Daimon, H., Y. Tezuka, A. Otaka, N. Kanada, S.K. Lee, S. Ino, H. Namba and H. Kuroda, Two-dimensional photoelectron diffraction patterns by display-type spherical mirror analyzer 242 (1991) 288
Del Sole, R., see Reining 242 (1991) 222
Ding, X.M., T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2 × 4)–c(2 × 8) and $Al_xGa_{1-x}As$(100) surfaces 242 (1991) 284
Ding, Z.-J., see Yoshikawa 242 (1991) 434
Domen, K., see Hara 242 (1991) 459

Dumas, P., see Chabal 242 (1991) 524

Ebina, K., see Kaburagi 242 (1991) 107
Ebina, K. and M. Kaburagi, Three-body interaction between adsorbates 242 (1991) 124
Enta, Y., S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2 × 1, c(4 × 2), 2 × 1–Na and 2 × 2–Ga 242 (1991) 277

Fujima, N., see Yamaguchi 242 (1991) 233
Fujimoto, H., see Tokutaka 242 (1991) 50
Fujita, M., H. Nagayoshi and A. Yoshimori, Electronic structure of the DAS model for the Si(111)7 × 7 reconstructed surface by energy band calculations 242 (1991) 229
Fukuda, T., see Harada 242 (1991) 95
Funabashi, M., T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59

Godfrey, M.J., see Needs 242 (1991) 215
Grazhulis, V.A., see Abramov 242 (1991) 45
Guyot-Sionnest, P., see Chabal 242 (1991) 524

Hagino, M., see Nomura 242 (1991) 166
Hanada, T. and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137
Hanada, T., see Sekine 242 (1991) 508
Hara, M., K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459
Harada, Y., H. Hayashi, S. Masuda, T. Fukuda, N. Sato, S. Kato, K. Kobayashi, H. Kuroda and H. Ozaki, Characterization of organic ultra-thin films by Penning ionization electron spectroscopy during layer-by-layer preparation: TFTCNQ, TMTSF and their charge transfer complex 242 (1991) 95

Harada, Y., see Masuda 242 (1991) 400
Hayashi, H., see Harada 242 (1991) 95
Higashi, G.S., see Chabal 242 (1991) 524
Hikita, T., see Sekine 242 (1991) 508
Himes, D., see Celli 242 (1991) 518
Hirai, M., see Kawamoto 242 (1991) 331
Homma, I., Y. Tanishiro and K. Yagi, REM and TEM studies of 2D Au–Cu alloy adsorbates on a Si(111) surface 242 (1991) 81
Hongo, S., see Urano 242 (1991) 39
Hübner, W. and K.-H. Bennemann, Theory of nonlinear surface magneto-optics: inclusion of band structure and matrix elements for ferromagnetic nickel 242 (1991) 299
Huzimura, R., see Yanagisawa 242 (1991) 513

Ichimiya, A., see Makita 242 (1991) 65
Ichimiya, A., see Irisawa 242 (1991) 148
Ichimiya, A., see Nakahara 242 (1991) 162
Ichimiya, A., see Kanie 242 (1991) 417
Ilisca, E., Molecule–surface complexes and catalytic reactions 242 (1991) 470
Inaba, A., T. Shirakami and H. Chihara, Calorimetric studies of phase transitions in submonolayer physisorbed phases 242 (1991) 202
Ino, S., see Daimon 242 (1991) 288
Inoue, K., M. Nakayama and H. Kawai, The extra branch of ARUPS spectra and the atomic structure of the Si(100) surface 242 (1991) 244
Inoue, M., see Namatame 242 (1991) 294
Inoue, Y., see Kurosawa 242 (1991) 475
Ionov, A.M., see Abramov 242 (1991) 45
Irisawa, T., A. Ichimiya and T. Kuroda, Periodic changes in the structure of a surface growing under MBE conditions and RHEED oscillation 242 (1991) 148
Ishida, H., Theory of alkali adsorption on simple metal surfaces 242 (1991) 341
Ishida, H., see Kobayashi 242 (1991) 349
Ishihara, N., see Tokutaka 242 (1991) 50
Ishihara, N., see Nishimori 242 (1991) 157
Ishii, A. and T. Aisaka, Theoretical analysis of angle-resolved photoemission for simple metals 242 (1991) 250
Ishii, A. and S. Shindo, Surface electronic structure determination by positronium formation spectroscopy 242 (1991) 256
Ishii, H., see Masuda 242 (1991) 400
Ishikawa, K., see Nomura 242 (1991) 166
Ishikawa, T., see Takahashi 242 (1991) 54
Isshiki, N., see Tsukada 242 (1991) 12
Ito, M., see Kinomoto 242 (1991) 538

Iwami, M., see Kawamoto 242 (1991) 331

Jiang, M.Y., G. Pajer and E. Burstein, Role of surface electronic transitions in linear and nonlinear electromagnetic phenomena at noble metal surfaces: beyond jellium 242 (1991) 306

Kaburagi, M., T. Tonegawa and K. Ebina, Phase diagram of coadsorbate systems on the square lattice net 242 (1991) 107
Kaburagi, M., see Ebina 242 (1991) 124
Kageshima, M., see Yoshimura 242 (1991) 18
Kaise, Y., see Hara 242 (1991) 459
Kamba, H., see Miyake 242 (1991) 386
Kamiya, I., M. Katayama, E. Nomura and M. Aono, Separation of scattered ions and neutrals in CAICISS with an acceleration tube 242 (1991) 404
Kampen, T.U., L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314
Kanada, N., see Daimon 242 (1991) 288
Kanaji, T., see Urano 242 (1991) 39
Kanamori, J. and Y. Sakamoto, Lattice gas model of Si(111) and Ge(111) 242 (1991) 102
Kanamori, J., see Sakamoto 242 (1991) 119
Kang, H.J., see Kim 242 (1991) 428
Kanie, T., K. Oda, A. Ichimiya, T. Yasue, S. Ohtani and H. Tawara, Secondary electron spectra from a tantalum surface by multiply charged ions 242 (1991) 417
Kariotis, R., see Webb 242 (1991) 23
Kasai, H. and A. Okiji, Vibrational excitation dynamics in molecule–surface scattering 242 (1991) 394
Kasai, H., see Nakanishi 242 (1991) 410
Kasai, H., see Mizuno 242 (1991) 464
Kashihara, K., see Shoji 242 (1991) 422
Katayama, I., see Sumitomo 242 (1991) 90
Katayama, M., see Kamiya 242 (1991) 404
Kato, H., see Miyake 242 (1991) 386
Kato, S., see Harada 242 (1991) 95
Katsuki, S., see Miyoshi 242 (1991) 531
Kawai, H., see Inoue 242 (1991) 244
Kawai, M., see Hanada 242 (1991) 137
Kawai, M., see Sekine 242 (1991) 508
Kawamoto, S., M. Kusaka, M. Hirai and M. Iwami, Nonmetal to metal phase transition in the Mn/Si(111)7 × 7 system 242 (1991) 331
Kawamura, T. and P.A. Maksym, Monte Carlo simulation of single domain Si(100) surfaces 242 (1991) 143
Kawanishi, N., see Nishigaki 242 (1991) 358

Kawazu, A., see Yoshimura 242 (1991) 18
Kikuta, S., see Takahashi 242 (1991) 54
Kim, Y.S., D.W. Moon, J.C. Lee and H.J. Kang, A study of matrix effects in CsI on Au by time-of-flight SIMS 242 (1991) 428
Kinomoto, Y., S. Watanabe, M. Takahashi and M. Ito, Infrared spectra of CO adsorbed on Pt(100), Pt(111), and Pt(110) electrode surfaces 242 (1991) 538
Kishida, S., see Tokutaka 242 (1991) 50
Kishida, S., see Nishimori 242 (1991) 157
Kitajima, Y., see Funabashi 242 (1991) 59
Klauser, R., M. Oshima, H. Sugahara and Y. Murata, The influence of a RbF interlayer on the Ge/GaAs interface properties 242 (1991) 319
Klauser, R., see Sugahara 242 (1991) 335
Kleyn, A.W., see Tenner 242 (1991) 376
Kobayashi, K., see Tsukada 242 (1991) 12
Kobayashi, K., see Harada 242 (1991) 95
Kobayashi, K., S. Blügel, H. Ishida and K. Terakura, Atomic arrangement of alkali adatoms on the Si(001)–2 × 1 surface 242 (1991) 349
Kodama, S., see Ueda 242 (1991) 454
Koenders, L., see Kampen 242 (1991) 314
Kohmoto, S., see Makita 242 (1991) 65
Kono, S., see Enta 242 (1991) 277
Kuipers, E.W., see Tenner 242 (1991) 376
Kuroda, H., see Namba 242 (1991) 32
Kuroda, H., see Funabashi 242 (1991) 59
Kuroda, H., see Harada 242 (1991) 95
Kuroda, H., see Ding 242 (1991) 284
Kuroda, H., see Daimon 242 (1991) 288
Kuroda, T., see Irisawa 242 (1991) 148
Kurosawa, K., Y. Takigawa, W. Sasaki, M. Okuda and Y. Inoue, Silicon precipitation in a surface layer of SiO_2 by high-power vacuum ultraviolet laser irradiation 242 (1991) 475
Kusaka, M., see Kawamoto 242 (1991) 331
Kuwahara, M., G. Mizutani, K. Sakamoto and S. Ushioda, Absolute Raman scattering cross sections of surface adsorbed Cu–phthalocyanine molecules 242 (1991) 544

Lagally, M.G., see Webb 242 (1991) 23
Lee, J.C., see Kim 242 (1991) 428
Lee, S.K., see Daimon 242 (1991) 288
Lundqvist, B.I., Aspects of molecule–surface interactions 242 (1991) 365
Lyo, I.-W., see Avouris 242 (1991) 1

Machida, K., Magnetic phase transition in adsorbed ^{3}He films 242 (1991) 206
Makita, T., S. Kohmoto and A. Ichimiya, RHEED intensity analysis of Si(001)-2 × 1 and 2 × 1-K surface structures 242 (1991) 65
Maksym, P.A., see Kawamura 242 (1991) 143
Mansfield, M., see Needs 242 (1991) 215
Mase, K. and Y. Murata, LEED observation of NO adsorption-induced relaxation on a single-domain Pt(001)–(20 × 5) surface 242 (1991) 132
Mase, K., S. Mizuno, Y. Achiba and Y. Murata, Photostimulated desorption of NO on Pt(001) studied with a multiphonon ionization technique 242 (1991) 444
Masuda, S., see Harada 242 (1991) 95
Masuda, S., H. Ishii and Y. Harada, Two-hole states of the outermost surface layer studied by metastable atom electron spectroscopy. Si(111)–7 × 7 and Si(100)–2 × 1 242 (1991) 400
Matsuda, S., see Nishigaki 242 (1991) 358
Matsumura, K., see Yanagisawa 242 (1991) 513
Matsushima, T., Spatial distribution of reactive CO_2 desorption on Pt(110)-(1 × 2) surfaces 242 (1991) 489
Men, F.K., see Webb 242 (1991) 23
Mitome, M. and K. Takayanagi, The direct observation of the Ge(001) dimer structure by high resolution UHV transmission electron microscopy 242 (1991) 69
Miyahara, T., see Ding 242 (1991) 284
Miyake, T., S. Soeki, H. Kato, T. Nakamura, A. Namiki, H. Kamba and T. Suzaki, Molecular beam study on scattering and sticking of molecular oxygen at Si(100) 242 (1991) 386
Miyao, M., see Nomura 242 (1991) 166
Miyoshi, E., Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531
Mizuno, M., H. Kasai and A. Okiji, Thermal desorption of molecules coadsorbed on metal surfaces 242 (1991) 464
Mizuno, S., see Mase 242 (1991) 444
Mizutani, G., see Kuwahara 242 (1991) 544
Mödl, A., see Schwarzwald 242 (1991) 437
Mönch, W., see Kampen 242 (1991) 314
Mönch, W., see Troost 242 (1991) 324
Moon, D.W., see Kim 242 (1991) 428
Mori, H., see Yoshimura 242 (1991) 18
Murakami, K., see Nomura 242 (1991) 166
Murakami, Y. and H. Suematsu, Magnetic phase transition of oxygen monolayer films adsorbed on exfoliated graphite 242 (1991) 211
Murata, Y., see Mase 242 (1991) 132
Murata, Y., see Klauser 242 (1991) 319
Murata, Y., see Mase 242 (1991) 444
Muto, S., see Ding 242 (1991) 284

Nagayoshi, H., see Fujita 242 (1991) 229

Nagayoshi, H., Electronic structure of the Si(111)$\sqrt{3} \times \sqrt{3}$ surface with column V adatoms 242 (1991) 239

Naitoh, M., F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152

Nakahara, H. and A. Ichimiya, Metastable structure of Si(111) surface during homoepitaxial growth 242 (1991) 162

Nakamura, T., see Miyake 242 (1991) 386

Nakanishi, H., H. Kasai and A. Okiji, Electron correlation effects on charge transfer and energy dissipation in atom or ion scattering from metal surfaces 242 (1991) 410

Nakatani, S., see Takahashi 242 (1991) 54

Nakayama, M., see Inoue 242 (1991) 244

Namatame, H., S. Nohara, H. Negishi, M. Inoue and S. Suga, Inverse photoemission study of transition metal intercalation and surface adsorbed TiS_2 242 (1991) 294

Namba, H., Y. Okawa and H. Kuroda, Rearrangement of surface steps of the Ni(7 9 11) surface by hydrogen adsorption 242 (1991) 32

Namba, H., see Ding 242 (1991) 284

Namba, H., see Daimon 242 (1991) 288

Namiki, A., see Miyake 242 (1991) 386

Nannichi, Y., see Sugahara 242 (1991) 335

Natori, A., see Wu 242 (1991) 191

Natori, A., S. Ohta and H. Yasunaga, Structural change of a heterogeneous thin film patch by surface electromigration 242 (1991) 195

Needs, R.J., M.J. Godfrey and M. Mansfield, Theory of surface stress and surface reconstruction 242 (1991) 215

Negishi, H., see Namatame 242 (1991) 294

Nieuwenhuys, B.E., see Tanaka 242 (1991) 503

Nishigaki, S., T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358

Nishihara, C., see Hara 242 (1991) 459

Nishijima, M., T. Sekitani, J. Yoshinobu and M. Onchi, Chemisorption and thermal decomposition of ethylene on clean and modified Pd(110) surfaces: electron energy loss spectroscopy, low-energy electron diffraction, and thermal desorption studies 242 (1991) 493

Nishijima, M., S. Tanaka, N. Takagi and M. Onchi, Chemical reactivity of the Si(100)(2 × 1)-K surface: electron energy loss spectroscopy and thermal desorption studies 242 (1991) 498

Nishimori, K., see Tokutaka 242 (1991) 50

Nishimori, K., H. Tokutaka, T. Tamon, S. Kishida and N. Ishihara, A RHEED study of the initial growth of Ag on the Si(001) surface 242 (1991) 157

Nishina, Y., see Sasaki 242 (1991) 549

Nohara, S., see Namatame 242 (1991) 294

Nomura, E., see Kamiya 242 (1991) 404

Nomura, T., K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166

Nozoye, H., see Hara 242 (1991) 459

Oda, K., see Kanie 242 (1991) 417

Ohta, S., see Natori 242 (1991) 195

Ohta, T., see Funabashi 242 (1991) 59

Ohtani, S., see Kanie 242 (1991) 417

Oigawa, H., see Sugahara 242 (1991) 335

Okamoto, N., see Takahashi 242 (1991) 54

Okawa, Y., see Namba 242 (1991) 32

Okiji, A., see Kasai 242 (1991) 394

Okiji, A., see Nakanishi 242 (1991) 410

Okiji, A., see Mizuno 242 (1991) 464

Okuda, M., see Kurosawa 242 (1991) 475

Okumura, H., see Ding 242 (1991) 284

Onchi, M., see Nishijima 242 (1991) 493

Onchi, M., see Nishijima 242 (1991) 498

Onishi, T., see Hara 242 (1991) 459

Oshima, M., see Yoshimura 242 (1991) 18

Oshima, M., see Klauser 242 (1991) 319

Oshima, M., see Sugahara 242 (1991) 335

Otaka, A., see Daimon 242 (1991) 288

Oura, K., see Sumitomo 242 (1991) 90

Oura, K., see Naitoh 242 (1991) 152

Oura, K., see Shoji 242 (1991) 422

Ozaki, H., see Harada 242 (1991) 95

Pajer, G., see Jiang 242 (1991) 306

Panchenko, A.M., see Abramov 242 (1991) 45

Reining, L. and R. Del Sole, Self-consistent calculation of the bandgap and screening at Si(111)2 × 1 242 (1991) 222

Rückschloss, M., see Kampen 242 (1991) 314

Saito, G., see Yoshimura 242 (1991) 18

Saito, Y., see Yoshimura 242 (1991) 18

Sakai, Y., see Miyoshi 242 (1991) 531

Sakamoto, K., see Kuwahara 242 (1991) 544

Sakamoto, Y., see Kanamori 242 (1991) 102

Sakamoto, Y. and J. Kanamori, The (1 × 1) high temperature phase of Ge(111) and Si(111) 242 (1991) 119

Santoro, G., see Celli 242 (1991) 518

Sasaki, A., see Nomura 242 (1991) 166

Sasaki, T., see Nishigaki 242 (1991) 358

Sasaki, W., see Kurosawa 242 (1991) 475
Sasaki, Y. and Y. Nishina, Raman study of a silver electrode in electrolytes with SO_4^{2-} ions 242 (1991) 549
Sato, N., see Harada 242 (1991) 95
Schwartzentruber, B.S., see Webb 242 (1991) 23
Schwarzwald, R., A. Mödl and T.J. Chuang, Two dimensional imaging of photodesorbed species from surfaces and the desorption dynamics 242 (1991) 437
Sekine, R., M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates (Cu-$(DPM)_2$ and $Ca(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508
Sekitani, T., see Nishijima 242 (1991) 493
Shigekawa, H., see Yoshimura 242 (1991) 18
Shimizu, R., see Yoshikawa 242 (1991) 434
Shindo, H., see Hara 242 (1991) 459
Shindo, S., see Ishii 242 (1991) 256
Shiota, R., see Yoshimura 242 (1991) 18
Shirakami, T., see Inaba 242 (1991) 202
Shoji, F., see Sumitomo 242 (1991) 90
Shoji, F., see Naitoh 242 (1991) 152
Shoji, F., K. Kashihara, K. Sumitomo and K. Oura, Low-energy recoil-ion spectroscopy studies of hydrogen adsorption on Si(100)–2 × 1 surfaces 242 (1991) 422
Smit, K., see Kampen 242 (1991) 314
Soeki, S., see Miyake 242 (1991) 386
Somorjai, G.A., The puzzles of surface science and recent attempts to explain them 242 (1991) 481
Stolte, S., see Tenner 242 (1991) 376
Suematsu, H., see Murakami 242 (1991) 211
Suga, S., see Namatame 242 (1991) 294
Sugahara, H., see Klauser 242 (1991) 319
Sugahara, H., M. Oshima, R. Klauser, H. Oigawa and Y. Nannichi, Bonding states of chemisorbed sulfur atoms on GaAs 242 (1991) 335
Sumitomo, K., K.-I. Tanaka, I. Katayama, F. Shoji and K. Oura, TOF–ICISS study of surface damage formed by Ar ion bombardment of Si(100) 242 (1991) 90
Sumitomo, K., see Shoji 242 (1991) 422
Suzaki, T., see Miyake 242 (1991) 386
Suzuki, S., see Enta 242 (1991) 277

Takagi, N., see Nishijima 242 (1991) 498
Takahashi, M., see Kinomoto 242 (1991) 538
Takahashi, S., Y. Tanishiro and K. Takayanagi, Short range orders of an adsorbed layer: gold on the Si(111)-7 × 7 surface 242 (1991) 73
Takahashi, T., S. Nakatani, N. Okamoto, T. Ishikawa and S. Kikuta, A study of the Si(111)$\sqrt{3} \times \sqrt{3}$-Ag surface by transmission X-ray diffraction and X-ray diffraction topography 242 (1991) 54
Takano, A. and K. Ueda, A study of the oxygen adsorption process on a titanium single crystal surface by electron stimulated desorption 242 (1991) 450
Takano, A., see Ueda 242 (1991) 454
Takata, Y., see Funabashi 242 (1991) 59
Takayanagi, K., see Mitome 242 (1991) 69
Takayanagi, K., see Takahashi 242 (1991) 73
Takeda, H., see Nishigaki 242 (1991) 358
Takigawa, Y., see Kurosawa 242 (1991) 475
Tamon, T., see Nishimori 242 (1991) 157
Tanaka, K.-I., see Sumitomo 242 (1991) 90
Tanaka, K.-I., T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503
Tanaka, S., see Nishijima 242 (1991) 498
Tanishiro, Y., see Takahashi 242 (1991) 73
Tanishiro, Y., see Homma 242 (1991) 81
Tawara, H., see Kanie 242 (1991) 417
Tenner, M.G., E.W. Kuipers, A.W. Kleyn and S. Stolte, Classical trajectory study of the interaction of oriented NO and Ag(111) 242 (1991) 376
Terakura, K., see Kobayashi 242 (1991) 349
Teraoka, Y., Order–disorder transitions in fcc binary alloys with surfaces 242 (1991) 113
Tezuka, Y., see Daimon 242 (1991) 288
Toennies, J.P., see Celli 242 (1991) 518
Tokutaka, H., S. Kishida, H. Fujimoto, K. Nishimori and N. Ishihara, LEED-AES observations of the vacuum-cleaved Bi–Sr–Ca–Cu–O single crystals 242 (1991) 50
Tokutaka, H., see Nishimori 242 (1991) 157
Tonegawa, T., see Kaburagi 242 (1991) 107
Troost, D., H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324
Tsukada, M., K. Kobayashi and N. Isshiki, Effect of tip atomic and electronic structure on scanning tunneling microscopy/spectroscopy 242 (1991) 12

Uchida, Y., see Urano 242 (1991) 39
Ueba, H., Theory of resonant photoemission of adsorbates on metal surfaces 242 (1991) 266
Ueda, K., see Takano 242 (1991) 450

Ueda, K., S. Kodama and A. Takano, A study of hydrogen adsorption on the silicon single crystal surfaces by electron stimulated desorption (TOF-ESD) 242 (1991) 454
Urano, T., Y. Uchida, S. Hongo and T. Kanaji, Structure of the K adsorbed Si(001)2 × 1 surface studied by LEED 242 (1991) 39
Ushioda, S., see Kuwahara 242 (1991) 544

Watanabe, S., see Kinomoto 242 (1991) 538
Webb, M.B., F.K. Men, B.S. Schwartzentruber, R. Kariotis and M.G. Lagally, Surface step configurations under strain: kinetics and step–step interactions 242 (1991) 23
Wu, N.-J., A. Natori and H. Yasunaga, Mass transport of a Ag thin film on a stepped Si(111) surface 242 (1991) 191

Yagi, K., see Homma 242 (1991) 81
Yagi, K., see Yamanaka 242 (1991) 181
Yamabe, S., see Yanagisawa 242 (1991) 513
Yamada, K., see Nishigaki 242 (1991) 358
Yamada, T., see Tanaka 242 (1991) 503
Yamaguchi, T., see Nomura 242 (1991) 166
Yamaguchi, T. and N. Fujima, Electronic states of Si(001) stepped surfaces 242 (1991) 233
Yamanaka, A. and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181
Yamazaki, T. and K. Cho, Photoemission from the 2p core of surface dimers on Si(100) 242 (1991) 260
Yamochi, H., see Yoshimura 242 (1991) 18
Yanagisawa, Y., R. Huzimura, K. Matsumura and S. Yamabe, Oxygen isotope exchange between O_2 adsorbate and UV-irradiated MgO surfaces 242 (1991) 513
Yasue, T., see Kanie 242 (1991) 417
Yasunaga, H., Hetero-electromigration on semiconductor surfaces 242 (1991) 171
Yasunaga, H., see Wu 242 (1991) 191
Yasunaga, H., see Natori 242 (1991) 195
Yokoyama, T., see Funabashi 242 (1991) 59
Yoshikawa, H., Z.-J. Ding and R. Shimizu, On the radial distribution function for sub-kV backscattered electron diffraction from a disordered surface 242 (1991) 434
Yoshimori, A., see Fujita 242 (1991) 229
Yoshimura, M., N. Ara, M. Kageshima, R. Shiota, A. Kawazu, H. Shigekawa, Y. Saito, M. Oshima, H. Mori, H. Yamochi and G. Saito, The surface structure of an organic conductor $(BEDT\text{-}TTF)_2KHg(SCN)_4$ observed by scanning tunneling microscopy 242 (1991) 18
Yoshinobu, J., see Nishijima 242 (1991) 493

Zhang, G., see Celli 242 (1991) 518

Surface Science 242 (1991) 560–572
North-Holland

Subject index

Alkali halides

R. Klauser, M. Oshima, H. Sugahara and Y. Murata, The influence of a RbF interlayer on the Ge/GaAs interface properties 242 (1991) 319

Y.S. Kim, D.W. Moon, J.C. Lee and H.J. Kang, A study of matrix effects in CsI on Au by time-of-flight SIMS 242 (1991) 428

Alkali metals

T. Urano, Y. Uchida, S. Hongo and T. Kanaji, Structure of the K adsorbed Si(001)2 × 1 surface studied by LEED 242 (1991) 39

T. Makita, S. Kohmoto and A. Ichimiya, RHEED intensity analysis of Si(001)-2 × 1 and 2 × 1-K surface structures 242 (1991) 65

A. Ishii and T. Aisaka, Theoretical analysis of angle-resolved photoemission for simple metals 242 (1991) 250

Y. Enta, S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2 × 1, c(4 × 2), 2 × 1–Na and 2 × 2–Ga 242 (1991) 277

H. Ishida, Theory of alkali adsorption on simple metal surfaces 242 (1991) 341

K. Kobayashi, S. Blügel, H. Ishida and K. Terakura, Atomic arrangement of alkali adatoms on the Si(001)–2 × 1 surface 242 (1991) 349

I.P. Batra, Peierls instability considerations for alkali metal chains on Si(001)-2 × 1 242 (1991) 354

S. Nishigaki, T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358

M. Nishijima, S. Tanaka, N. Takagi and M. Onchi, Chemical reactivity of the Si(100)(2 × 1)-K surface: electron energy loss spectroscopy and thermal desorption studies 242 (1991) 498

E. Miyoshi, Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531

Alloys

Y. Teraoka, Order–disorder transitions in fcc binary alloys with surfaces 242 (1991) 113

K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503

Aluminium

A. Ishii and T. Aisaka, Theoretical analysis of angle-resolved photoemission for simple metals 242 (1991) 250

A. Ishii and S. Shindo, Surface electronic structure determination by positronium formation spectroscopy 242 (1991) 256

X.M. Ding, T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2 × 4)–c(2 × 8) and $Al_xGa_{1-x}As$(100) surfaces 242 (1991) 284

M. Hara, K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459

Arsenic

H. Nagayoshi, Electronic structure of the Si(111)$\sqrt{3} \times \sqrt{3}$ surface with column V adatoms 242 (1991) 239

X.M. Ding, T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2 × 4)–c(2 × 8) and $Al_xGa_{1-x}As$(100) surfaces 242 (1991) 284

Atomic and molecular beam studies

B.I. Lundqvist, Aspects of molecule–surface interactions 242 (1991) 365

M.G. Tenner, E.W. Kuipers, A.W. Kleyn and S. Stolte, Classical trajectory study of the interaction of oriented NO and Ag(111) 242 (1991) 376

T. Miyake, S. Soeki, H. Kato, T. Nakamura, A. Namiki, H. Kamba and T. Suzaki, Molecular beam study on scattering and sticking of molecular oxygen at Si(100) 242 (1991) 386
H. Kasai and A. Okiji, Vibrational excitation dynamics in molecule–surface scattering 242 (1991) 394
V. Celli, D. Himes, V. Bortolani, G. Santoro, J.P. Toennies and G. Zhang, One-phonon and multiphonon processes in atom–surface scattering 242 (1991) 518

Auger electron spectroscopy

H. Yasunaga, Hetero-electromigration on semiconductor surfaces 242 (1991) 171
N.-J. Wu, A. Natori and H. Yasunaga, Mass transport of a Ag thin film on a stepped Si(111) surface 242 (1991) 191
D. Troost, H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324
S. Kawamoto, M. Kusaka, M. Hirai and M. Iwami, Nonmetal to metal phase transition in the Mn/Si(111)7 × 7 system 242 (1991) 331

Band structure

M. Fujita, H. Nagayoshi and A. Yoshimori, Electronic structure of the DAS model for the Si(111)7 × 7 reconstructed surface by energy band calculations 242 (1991) 229
H. Nagayoshi, Electronic structure of the Si(111)$\sqrt{3} \times \sqrt{3}$ surface with column V adatoms 242 (1991) 239
K. Inoue, M. Nakayama and H. Kawai, The extra branch of ARUPS spectra and the atomic structure of the Si(100) surface 242 (1991) 244
H. Namatame, S. Nohara, H. Negishi, M. Inoue and S. Suga, Inverse photoemission study of transition metal intercalation and surface adsorbed TiS_2 242 (1991) 294
W. Hübner and K.-H. Bennemann, Theory of nonlinear surface magneto-optics: inclusion of band structure and matrix elements for ferromagnetic nickel 242 (1991) 299
M.Y. Jiang, G. Pajer and E. Burstein, Role of surface electronic transitions in linear and nonlinear electromagnetic phenomena at noble metal surfaces: beyond jellium 242 (1991) 306

Bismuth

T. Hanada and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137

Carbides

H. Daimon, Y. Tezuka, A. Otaka, N. Kanada, S.K. Lee, S. Ino, H. Namba and H. Kuroda, Two-dimensional photoelectron diffraction patterns by display-type spherical mirror analyzer 242 (1991) 288

Carbon monoxide

M. Mizuno, H. Kasai and A. Okiji, Thermal desorption of molecules coadsorbed on metal surfaces 242 (1991) 464
T. Matsushima, Spatial distribution of reactive CO_2 desorption on Pt(110)-(1 × 2) surfaces 242 (1991) 489
E. Miyoshi, Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531
Y. Kinomoto, S. Watanabe, M. Takahashi and M. Ito, Infrared spectra of CO adsorbed on Pt(100), Pt(111), and Pt(110) electrode surfaces 242 (1991) 538

Chemisorption theory

K. Ebina and M. Kaburagi, Three-body interaction between adsorbates 242 (1991) 124
H. Ishida, Theory of alkali adsorption on simple metal surfaces 242 (1991) 341
K. Kobayashi, S. Blügel, H. Ishida and K. Terakura, Atomic arrangement of alkali adatoms on the Si(001)–2 × 1 surface 242 (1991) 349
E. Ilisca, Molecule–surface complexes and catalytic reactions 242 (1991) 470
E. Miyoshi, Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531

Copper

I. Homma, Y. Tanishiro and K. Yagi, REM and TEM studies of 2D Au–Cu alloy adsorbates on a Si(111) surface 242 (1991) 81

A. Yamanaka and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181
R. Sekine, M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates ($Cu(DPM)_2$ and $Ca(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508
E. Miyoshi, Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531

Dielectric constant

L. Reining and R. Del Sole, Self-consistent calculation of the bandgap and screening at Si(111)2 × 1 242 (1991) 222

Electron diffraction, see also Low energy electron diffraction

T. Makita, S. Kohmoto and A. Ichimiya, RHEED intensity analysis of Si(001)-2 × 1 and 2 × 1-K surface structures 242 (1991) 65
T. Hanada and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137
K. Nishimori, H. Tokutaka, T. Tamon, S. Kishida and N. Ishihara, A RHEED study of the initial growth of Ag on the Si(001) surface 242 (1991) 157
H. Nakahara and A. Ichimiya, Metastable structure of Si(111) surface during homoepitaxial growth 242 (1991) 162
T. Nomura, K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166
H. Daimon, Y. Tezuka, A. Otaka, N. Kanada, S.K. Lee, S. Ino, H. Namba and H. Kuroda, Two-dimensional photoelectron diffraction patterns by display-type spherical mirror analyzer 242 (1991) 288

Electron emission

Y. Harada, H. Hayashi, S. Masuda, T. Fukuda, N. Sato, S. Kato, K. Kobayashi, H. Kuroda and H. Ozaki, Characterization of organic ultra-thin films by Penning ionization electron spectroscopy during layer-by-layer preparation: TFTCNQ, TMTSF and their charge transfer complex 242 (1991) 95
S. Nishigaki, T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358
S. Masuda, H. Ishii and Y. Harada, Two-hole states of the outermost surface layer studied by metastable atom electron spectroscopy. Si(111)–7 × 7 and Si(100)–2 × 1 242 (1991) 400
T. Kanie, K. Oda, A. Ichimiya, T. Yasue, S. Ohtani and H. Tawara, Secondary electron spectra from a tantalum surface by multiply charged ions 242 (1991) 417

Electron energy loss spectroscopy

S. Kawamoto, M. Kusaka, M. Hirai and M. Iwami, Nonmetal to metal phase transition in the Mn/Si(111)7 × 7 system 242 (1991) 331
M. Nishijima, T. Sekitani, J. Yoshinobu and M. Onchi, Chemisorption and thermal decomposition of ethylene on clean and modified Pd(110) surfaces: electron energy loss spectroscopy, low-energy electron diffraction, and thermal desorption studies 242 (1991) 493
M. Nishijima, S. Tanaka, N. Takagi and M. Onchi, Chemical reactivity of the Si(100)(2 × 1)-K surface: electron energy loss spectroscopy and thermal desorption studies 242 (1991) 498
K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503

Electron microscopy

M. Mitome and K. Takayanagi, The direct observation of the Ge(001) dimer structure by high resolution UHV transmission electron microscopy 242 (1991) 69
S. Takahashi, Y. Tanishiro and K. Takayanagi, Short range orders of an adsorbed layer: gold on the Si(111)-7 × 7 surface 242 (1991) 73
I. Homma, Y. Tanishiro and K. Yagi, REM and TEM studies of 2D Au–Cu alloy adsorbates on a Si(111) surface 242 (1991) 81
A. Yamanaka and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181

Electron scattering

H. Yoshikawa, Z.-J. Ding and R. Shimizu, On the radial distribution function for sub-kV backscattered electron diffraction from a disordered surface 242 (1991) 434

Electron stimulated desorption

A. Takano and K. Ueda, A study of the oxygen adsorption process on a titanium single crystal surface by electron stimulated desorption 242 (1991) 450

K. Ueda, S. Kodama and A. Takano, A study of hydrogen adsorption on the silicon single crystal surfaces by electron stimulated desorption (TOF-ESD) 242 (1991) 454

Ethylene

M. Nishijima, T. Sekitani, J. Yoshinobu and M. Onchi, Chemisorption and thermal decomposition of ethylene on clean and modified Pd(110) surfaces: electron energy loss spectroscopy, low-energy electron diffraction, and thermal desorption studies 242 (1991) 493

Gallium

Y. Enta, S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2×1, $c(4 \times 2)$, 2×1–Na and 2×2–Ga 242 (1991) 277

Gallium arsenide

T. Nomura, K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166

X.M. Ding, T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2×4)–$c(2 \times 8)$ and $Al_xGa_{1-x}As(100)$ surfaces 242 (1991) 284

T.U. Kampen, L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314

R. Klauser, M. Oshima, H. Sugahara and Y. Murata, The influence of a RbF interlayer on the Ge/GaAs interface properties 242 (1991) 319

D. Troost, H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324

H. Sugahara, M. Oshima, R. Klauser, H. Oigawa and Y. Nannichi, Bonding states of chemisorbed sulfur atoms on GaAs 242 (1991) 335

Gallium phosphide

T. Nomura, K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166

Germanium

M. Mitome and K. Takayanagi, The direct observation of the Ge(001) dimer structure by high resolution UHV transmission electron microscopy 242 (1991) 69

J. Kanamori and Y. Sakamoto, Lattice gas model of Si(111) and Ge(111) 242 (1991) 102

Y. Sakamoto and J. Kanamori, The (1×1) high temperature phase of Ge(111) and Si(111) 242 (1991) 119

R. Klauser, M. Oshima, H. Sugahara and Y. Murata, The influence of a RbF interlayer on the Ge/GaAs interface properties 242 (1991) 319

Gold

S. Takahashi, Y. Tanishiro and K. Takayanagi, Short range orders of an adsorbed layer: gold on the Si(111)-7×7 surface 242 (1991) 73

I. Homma, Y. Tanishiro and K. Yagi, REM and TEM studies of 2D Au–Cu alloy adsorbates on a Si(111) surface 242 (1991) 81

Y.S. Kim, D.W. Moon, J.C. Lee and H.J. Kang, A study of matrix effects in CsI on Au by time-of-flight SIMS 242 (1991) 428

H. Yoshikawa, Z.-J. Ding and R. Shimizu, On the radial distribution function for sub-kV backscattered electron diffraction from a disordered surface 242 (1991) 434

Graphite

Y. Harada, H. Hayashi, S. Masuda, T. Fukuda, N. Sato, S. Kato, K. Ko-

bayashi, H. Kuroda and H. Ozaki, Characterization of organic ultra-thin films by Penning ionization electron spectroscopy during layer-by-layer preparation: TFTCNQ, TMTSF and their charge transfer complex 242 (1991) 95
A. Inaba, T. Shirakami and H. Chihara, Calorimetric studies of phase transitions in submonolayer physisorbed phases 242 (1991) 202
Y. Murakami and H. Suematsu, Magnetic phase transition of oxygen monolayer films adsorbed on exfoliated graphite 242 (1991) 211

Halogens

M. Funabashi, T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59

Hydrogen

H. Namba, Y. Okawa and H. Kuroda, Rearrangement of surface steps of the Ni(7 9 11) surface by hydrogen adsorption 242 (1991) 32
M. Naitoh, F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152
T.U. Kampen, L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314
F. Shoji, K. Kashihara, K. Sumitomo and K. Oura, Low-energy recoil-ion spectroscopy studies of hydrogen adsorption on Si(100)–2 × 1 surfaces 242 (1991) 422
K. Ueda, S. Kodama and A. Takano, A study of hydrogen adsorption on the silicon single crystal surfaces by electron stimulated desorption (TOF-ESD) 242 (1991) 454
M. Hara, K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459
K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503
Y.J. Chabal, P. Dumas, P. Guyot-Sionnest and G.S. Higashi, Vibrational dynamics of the ideally H-terminated Si(111) surface 242 (1991) 524

Indium

A. Yamanaka and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181

Infrared spectroscopy

R. Sekine, M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates ($Cu(DPM)_2$ and $Ca(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508
Y. Kinomoto, S. Watanabe, M. Takahashi and M. Ito, Infrared spectra of CO adsorbed on Pt(100), Pt(111), and Pt(110) electrode surfaces 242 (1991) 538

Inorganic compounds

A.A. Abramov, N.V. Abrosimov, V.A. Grazhulis, A.M. Ionov and A.M. Panchenko, LEED and spectroscopic studies of (001) surfaces of Nd_2CuO_4 and $(NdCe)_2CuO_4$ single crystals 242 (1991) 45
H. Tokutaka, S. Kishida, H. Fujimoto, K. Nishimori and N. Ishihara, LEED-AES observations of the vacuum-cleaved Bi–Sr–Ca–Cu–O single crystals 242 (1991) 50
Y. Sasaki and Y. Nishina, Raman study of a silver electrode in electrolytes with SO_4^{2-} ions 242 (1991) 549

Ion bombardment

K. Sumitomo, K.-I. Tanaka, I. Katayama, F. Shoji and K. Oura, TOF–ICISS study of surface damage formed by Ar ion bombardment of Si(100) 242 (1991) 90

Ion scattering

K. Sumitomo, K.-I. Tanaka, I. Katayama, F. Shoji and K. Oura, TOF–ICISS study of surface damage formed by Ar ion bombardment of Si(100) 242 (1991) 90
M. Naitoh, F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152

I. Kamiya, M. Katayama, E. Nomura and M. Aono, Separation of scattered ions and neutrals in CAICISS with an acceleration tube 242 (1991) 404
H. Nakanishi, H. Kasai and A. Okiji, Electron correlation effects on charge transfer and energy dissipation in atom or ion scattering from metal surfaces 242 (1991) 410
F. Shoji, K. Kashihara, K. Sumitomo and K. Oura, Low-energy recoil-ion spectroscopy studies of hydrogen adsorption on Si(100)–2 × 1 surfaces 242 (1991) 422

Low energy electron diffraction

H. Namba, Y. Okawa and H. Kuroda, Rearrangement of surface steps of the Ni(7 9 11) surface by hydrogen adsorption 242 (1991) 32
T. Urano, Y. Uchida, S. Hongo and T. Kanaji, Structure of the K adsorbed Si(001)2 × 1 surface studied by LEED 242 (1991) 39
A.A. Abramov, N.V. Abrosimov, V.A. Grazhulis, A.M. Ionov and A.M. Panchenko, LEED and spectroscopic studies of (001) surfaces of Nd_2CuO_4 and $(NdCe)_2CuO_4$ single crystals 242 (1991) 45
H. Tokutaka, S. Kishida, H. Fujimoto, K. Nishimori and N. Ishihara, LEED-AES observations of the vacuum-cleaved Bi–Sr–Ca–Cu–O single crystals 242 (1991) 50
K. Mase and Y. Murata, LEED observation of NO adsorption-induced relaxation on a single-domain Pt(001)–(20 × 5) surface 242 (1991) 132
M. Naitoh, F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152

Magnesium oxide

Y. Yanagisawa, R. Huzimura, K. Matsumura and S. Yamabe, Oxygen isotope exchange between O_2 adsorbate and UV-irradiated MgO surfaces 242 (1991) 513

Magnetic measurements

Y. Murakami and H. Suematsu, Magnetic phase transition of oxygen monolayer films adsorbed on exfoliated graphite 242 (1991) 211

Manganese

S. Kawamoto, M. Kusaka, M. Hirai and M. Iwami, Nonmetal to metal phase transition in the Mn/Si(111)7 × 7 system 242 (1991) 331

Magnetic structures

K. Machida, Magnetic phase transition in adsorbed ^{3}He films 242 (1991) 206

Metals

H. Ishida, Theory of alkali adsorption on simple metal surfaces 242 (1991) 341

Molecular beam epitaxy

T. Irisawa, A. Ichimiya and T. Kuroda, Periodic changes in the structure of a surface growing under MBE conditions and RHEED oscillation 242 (1991) 148
H. Nakahara and A. Ichimiya, Metastable structure of Si(111) surface during homoepitaxial growth 242 (1991) 162
T. Nomura, K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166

Nickel

H. Namba, Y. Okawa and H. Kuroda, Rearrangement of surface steps of the Ni(7 9 11) surface by hydrogen adsorption 242 (1991) 32
M. Funabashi, T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59
H. Namatame, S. Nohara, H. Negishi, M. Inoue and S. Suga, Inverse photoemission study of transition metal intercalation and surface adsorbed TiS_2 242 (1991) 294
W. Hübner and K.-H. Bennemann, Theory of nonlinear surface magneto-optics: inclusion of band structure and matrix elements for ferromagnetic nickel 242 (1991) 299

Nitric oxide

K. Mase and Y. Murata, LEED observation of NO adsorption-induced relaxa-

tion on a single-domain Pt(001)–(20 × 5) surface 242 (1991) 132
M.G. Tenner, E.W. Kuipers, A.W. Kleyn and S. Stolte, Classical trajectory study of the interaction of oriented NO and Ag(111) 242 (1991) 376
R. Schwarzwald, A. Mödl and T.J. Chuang, Two dimensional imaging of photodesorbed species from surfaces and the desorption dynamics 242 (1991) 437
K. Mase, S. Mizuno, Y. Achiba and Y. Murata, Photostimulated desorption of NO on Pt(001) studied with a multiphonon ionization technique 242 (1991) 444
M. Mizuno, H. Kasai and A. Okiji, Thermal desorption of molecules coadsorbed on metal surfaces 242 (1991) 464
K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503

Nitrides

D. Troost, H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324

Nitrous oxide

A. Inaba, T. Shirakami and H. Chihara, Calorimetric studies of phase transitions in submonolayer physisorbed phases 242 (1991) 202

Noble gases

K. Machida, Magnetic phase transition in adsorbed ^{3}He films 242 (1991) 206

Organic substances

M. Yoshimura, N. Ara, M. Kageshima, R. Shiota, A. Kawazu, H. Shigekawa, Y. Saito, M. Oshima, H. Mori, H. Yamochi and G. Saito, The surface structure of an organic conductor $(BEDT\text{-}TTF)_2KHg(SCN)_4$ observed by scanning tunneling microscopy 242 (1991) 18
Y. Harada, H. Hayashi, S. Masuda, T. Fukuda, N. Sato, S. Kato, K. Kobayashi, H. Kuroda and H. Ozaki, Characterization of organic ultra-thin films by Penning ionization electron spectroscopy during layer-by-layer preparation: TFTCNQ, TMTSF and their charge transfer complex 242 (1991) 95
R. Sekine, M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates ($Cu(DPM)_2$ and $Ca(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508
M. Kuwahara, G. Mizutani, K. Sakamoto and S. Ushioda, Absolute Raman scattering cross sections of surface adsorbed Cu–phthalocyanine molecules 242 (1991) 544

Oxygen

Ph. Avouris and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1
Y. Murakami and H. Suematsu, Magnetic phase transition of oxygen monolayer films adsorbed on exfoliated graphite 242 (1991) 211
S. Nishigaki, T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358
S. Nishigaki, T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358
T. Miyake, S. Soeki, H. Kato, T. Nakamura, A. Namiki, H. Kamba and T. Suzaki, Molecular beam study on scattering and sticking of molecular oxygen at Si(100) 242 (1991) 386
A. Takano and K. Ueda, A study of the oxygen adsorption process on a titanium single crystal surface by electron stimulated desorption 242 (1991) 450
T. Matsushima, Spatial distribution of reactive CO_2 desorption on Pt(110)-(1 × 2) surfaces 242 (1991) 489

Palladium

M. Nishijima, T. Sekitani, J. Yoshinobu and M. Onchi, Chemisorption and thermal decomposition of ethylene on clean and modified Pd(110) surfaces: electron energy loss spectroscopy, low-energy electron diffraction, and thermal desorption studies 242 (1991) 493

K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503

Photodesorption

R. Schwarzwald, A. Mödl and T.J. Chuang, Two dimensional imaging of photodesorbed species from surfaces and the desorption dynamics 242 (1991) 437
K. Mase, S. Mizuno, Y. Achiba and Y. Murata, Photostimulated desorption of NO on Pt(001) studied with a multiphonon ionization technique 242 (1991) 444

Photoelectron spectroscopy

A.A. Abramov, N.V. Abrosimov, V.A. Grazhulis, A.M. Ionov and A.M. Panchenko, LEED and spectroscopic studies of (001) surfaces of Nd_2CuO_4 and $(NdCe)_2CuO_4$ single crystals 242 (1991) 45
K. Inoue, M. Nakayama and H. Kawai, The extra branch of ARUPS spectra and the atomic structure of the Si(100) surface 242 (1991) 244
A. Ishii and T. Aisaka, Theoretical analysis of angle-resolved photoemission for simple metals 242 (1991) 250
T. Yamazaki and K. Cho, Photoemission from the 2p core of surface dimers on Si(100) 242 (1991) 260
H. Ueba, Theory of resonant photoemission of adsorbates on metal surfaces 242 (1991) 266
Y. Enta, S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2×1, $c(4 \times 2)$, 2×1–Na and 2×2–Ga 242 (1991) 277
X.M. Ding, T. Miyahara, H. Okumura, S. Muto, H. Namba and H. Kuroda, Existence of Ga dangling bonds on As-stabilized GaAs(100)(2×4)–$c(2 \times 8)$ and $Al_xGa_{1-x}As(100)$ surfaces 242 (1991) 284
R. Klauser, M. Oshima, H. Sugahara and Y. Murata, The influence of a RbF interlayer on the Ge/GaAs interface properties 242 (1991) 319
D. Troost, H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324
H. Sugahara, M. Oshima, R. Klauser, H. Oigawa and Y. Nannichi, Bonding states of chemisorbed sulfur atoms on GaAs 242 (1991) 335
S. Masuda, H. Ishii and Y. Harada, Two-hole states of the outermost surface layer studied by metastable atom electron spectroscopy. Si(111)–7×7 and Si(100)–2×1 242 (1991) 400
M. Hara, K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459
K. Kurosawa, Y. Takigawa, W. Sasaki, M. Okuda and Y. Inoue, Silicon precipitation in a surface layer of SiO_2 by high-power vacuum ultraviolet laser irradiation 242 (1991) 475
R. Sekine, M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates ($Cu(DPM)_2$ and $Ca(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508

Photon emission

H. Namatame, S. Nohara, H. Negishi, M. Inoue and S. Suga, Inverse photoemission study of transition metal intercalation and surface adsorbed TiS_2 242 (1991) 294

Platinum

K. Mase and Y. Murata, LEED observation of NO adsorption-induced relaxation on a single-domain Pt(001)–(20×5) surface 242 (1991) 132
R. Schwarzwald, A. Mödl and T.J. Chuang, Two dimensional imaging of photodesorbed species from surfaces and the desorption dynamics 242 (1991) 437
K. Mase, S. Mizuno, Y. Achiba and Y. Murata, Photostimulated desorption of NO on Pt(001) studied with a multiphonon ionization technique 242 (1991) 444
M. Mizuno, H. Kasai and A. Okiji, Thermal desorption of molecules coadsorbed on metal surfaces 242 (1991) 464
G.A. Somorjai, The puzzles of surface science and recent attempts to explain them 242 (1991) 481
T. Matsushima, Spatial distribution of reactive CO_2 desorption on Pt(110)–(1×2) surfaces 242 (1991) 489
Y. Kinomoto, S. Watanabe, M. Takahashi and M. Ito, Infrared spectra of CO adsorbed on Pt(100), Pt(111), and Pt(110) electrode surfaces 242 (1991) 538

Positron spectroscopy

A. Ishii and S. Shindo, Surface electronic structure determination by positronium formation spectroscopy 242 (1991) 256

Raman scattering

T.U. Kampen, L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314

M. Kuwahara, G. Mizutani, K. Sakamoto and S. Ushioda, Absolute Raman scattering cross sections of surface adsorbed Cu–phthalocyanine molecules 242 (1991) 544

Y. Sasaki and Y. Nishina, Raman study of a silver electrode in electrolytes with SO_4^{2-} ions 242 (1991) 549

Rhodium

K.-I. Tanaka, T. Yamada and B.E. Nieuwenhuys, Synthesis of metastable surface complexes by chemical reactions. N and NH_x complexes on Pd(100), Rh(100) and Pt–Rh(100) 242 (1991) 503

Second harmonic generation

W. Hübner and K.-H. Bennemann, Theory of nonlinear surface magneto-optics: inclusion of band structure and matrix elements for ferromagnetic nickel 242 (1991) 299

M.Y. Jiang, G. Pajer and E. Burstein, Role of surface electronic transitions in linear and nonlinear electromagnetic phenomena at noble metal surfaces: beyond jellium 242 (1991) 306

Y.J. Chabal, P. Dumas, P. Guyot-Sionnest and G.S. Higashi, Vibrational dynamics of the ideally H-terminated Si(111) surface 242 (1991) 524

Secondary ion mass spectroscopy

Y.S. Kim, D.W. Moon, J.C. Lee and H.J. Kang, A study of matrix effects in CsI on Au by time-of-flight SIMS 242 (1991) 428

Silicon

Ph. Avouris and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1

T. Urano, Y. Uchida, S. Hongo and T. Kanaji, Structure of the K adsorbed Si(001)2 × 1 surface studied by LEED 242 (1991) 39

T. Takahashi, S. Nakatani, N. Okamoto, T. Ishikawa and S. Kikuta, A study of the Si(111)$\sqrt{3} \times \sqrt{3}$-Ag surface by transmission X-ray diffraction and X-ray diffraction topography 242 (1991) 54

T. Makita, S. Kohmoto and A. Ichimiya, RHEED intensity analysis of Si(001)-2 × 1 and 2 × 1-K surface structures 242 (1991) 65

S. Takahashi, Y. Tanishiro and K. Takayanagi, Short range orders of an adsorbed layer: gold on the Si(111)-7 × 7 surface 242 (1991) 73

I. Homma, Y. Tanishiro and K. Yagi, REM and TEM studies of 2D Au–Cu alloy adsorbates on a Si(111) surface 242 (1991) 81

K. Sumitomo, K.-I. Tanaka, I. Katayama, F. Shoji and K. Oura, TOF–ICISS study of surface damage formed by Ar ion bombardment of Si(100) 242 (1991) 90

J. Kanamori and Y. Sakamoto, Lattice gas model of Si(111) and Ge(111) 242 (1991) 102

Y. Sakamoto and J. Kanamori, The (1 × 1) high temperature phase of Ge(111) and Si(111) 242 (1991) 119

T. Hanada and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137

T. Kawamura and P.A. Maksym, Monte Carlo simulation of single domain Si(100) surfaces 242 (1991) 143

M. Naitoh, F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152

K. Nishimori, H. Tokutaka, T. Tamon, S. Kishida and N. Ishihara, A RHEED study of the initial growth of Ag on the Si(001) surface 242 (1991) 157

H. Nakahara and A. Ichimiya, Metastable structure of Si(111) surface during homoepitaxial growth 242 (1991) 162

H. Yasunaga, Hetero-electromigration on semiconductor surfaces 242 (1991) 171

A. Yamanaka and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181

N.-J. Wu, A. Natori and H. Yasunaga, Mass transport of a Ag thin film on a stepped Si(111) surface 242 (1991) 191

L. Reining and R. Del Sole, Self-consistent calculation of the bandgap and screening at Si(111)2 × 1 242 (1991) 222
M. Fujita, H. Nagayoshi and A. Yoshimori, Electronic structure of the DAS model for the Si(111)7 × 7 reconstructed surface by energy band calculations 242 (1991) 229
T. Yamaguchi and N. Fujima, Electronic states of Si(001) stepped surfaces 242 (1991) 233
H. Nagayoshi, Electronic structure of the Si(111)$\sqrt{3} \times \sqrt{3}$ surface with column V adatoms 242 (1991) 239
K. Inoue, M. Nakayama and H. Kawai. The extra branch of ARUPS spectra and the atomic structure of the Si(100) surface 242 (1991) 244
T. Yamazaki and K. Cho. Photoemission from the 2p core of surface dimers on Si(100) 242 (1991) 260
Y. Enta, S. Suzuki and S. Kono. Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2 × 1, c(4 × 2), 2 × 1–Na and 2 × 2–Ga 242 (1991) 277
H. Daimon, Y. Tezuka, A. Otaka, N. Kanada, S.K. Lee, S. Ino, H. Namba and H. Kuroda, Two-dimensional photoelectron diffraction patterns by display-type spherical mirror analyzer 242 (1991) 288
S. Kawamoto, M. Kusaka, M. Hirai and M. Iwami, Nonmetal to metal phase transition in the Mn/Si(111)7 × 7 system 242 (1991) 331
K. Kobayashi, S. Blügel, H. Ishida and K. Terakura, Atomic arrangement of alkali adatoms on the Si(001)–2 × 1 surface 242 (1991) 349
I.P. Batra, Peierls instability considerations for alkali metal chains on Si(001)-2 × 1 242 (1991) 354
S. Nishigaki, T. Sasaki, S. Matsuda, N. Kawanishi, H. Takeda and K. Yamada, Charge transfer and promoted oxygen uptake at alkalated Si(100) surfaces studied by Auger deexcitation of helium metastables 242 (1991) 358
T. Miyake, S. Soeki, H. Kato, T. Nakamura, A. Namiki, H. Kamba and T. Suzaki, Molecular beam study on scattering and sticking of molecular oxygen at Si(100) 242 (1991) 386
S. Masuda, H. Ishii and Y. Harada, Two-hole states of the outermost surface layer studied by metastable atom electron spectroscopy. Si(111)–7 × 7 and Si(100)–2 × 1 242 (1991) 400
I. Kamiya, M. Katayama, E.Nomura and M. Aono, Separation of scattered ions and neutrals in CAICISS with an acceleration tube 242 (1991) 404
F. Shoji, K. Kashihara, K. Sumitomo and K. Oura, Low-energy recoil-ion spectroscopy studies of hydrogen adsorption on Si(100)–2 × 1 surfaces 242 (1991) 422
K. Ueda, S. Kodama and A. Takano, A study of hydrogen adsorption on the silicon single crystal surfaces by electron stimulated desorption (TOF-ESD) 242 (1991) 454
K. Kurosawa, Y. Takigawa, W. Sasaki, M. Okuda and Y. Inoue, Silicon precipitation in a surface layer of SiO_2 by high-power vacuum ultraviolet laser irradiation 242 (1991) 475
M. Nishijima, S. Tanaka, N. Takagi and M. Onchi, Chemical reactivity of the Si(100)(2 × 1)-K surface: electron energy loss spectroscopy and thermal desorption studies 242 (1991) 498
Y.J. Chabal, P. Dumas, P. Guyot-Sionnest and G.S. Higashi, Vibrational dynamics of the ideally H-terminated Si(111) surface 242 (1991) 524

Silicon oxide

K. Kurosawa, Y. Takigawa, W. Sasaki, M. Okuda and Y. Inoue, Silicon precipitation in a surface layer of SiO_2 by high-power vacuum ultraviolet laser irradiation 242 (1991) 475
R. Sekine, M. Kawai, T. Hikita and T. Hanada, The reaction of copper and calcium dipivaloylmethanates (Cu-$(DPM)_2$ and Ca$(DPM)_2$) with hydroxyls on oxide surface 242 (1991) 508

Silver

T. Takahashi, S. Nakatani, N. Okamoto, T. Ishikawa and S. Kikuta, A study of the Si(111)$\sqrt{3} \times \sqrt{3}$-Ag surface by transmission X-ray diffraction and X-ray diffraction topography 242 (1991) 54
M. Naitoh, F. Shoji and K. Oura, Hydrogen-termination effects on the growth of Ag thin films on Si(111) surfaces 242 (1991) 152
K. Nishimori, H. Tokutaka, T. Tamon, S. Kishida and N. Ishihara, A RHEED study of the initial growth of Ag on the Si(001) surface 242 (1991) 157
H. Yasunaga, Hetero-electromigration on semiconductor surfaces 242 (1991) 171

N.-J. Wu, A. Natori and H. Yasunaga, Mass transport of a Ag thin film on a stepped Si(111) surface 242 (1991) 191
M.G. Tenner, E.W. Kuipers, A.W. Kleyn and S. Stolte, Classical trajectory study of the interaction of oriented NO and Ag(111) 242 (1991) 376
I. Kamiya, M. Katayama, E. Nomura and M. Aono, Separation of scattered ions and neutrals in CAICISS with an acceleration tube 242 (1991) 404
E. Miyoshi, Y. Sakai and S. Katsuki, A molecular orbital study for CO coadsorbed with K on Cu(001) and Ag(001) 242 (1991) 531
M. Kuwahara, G. Mizutani, K. Sakamoto and S. Ushioda, Absolute Raman scattering cross sections of surface adsorbed Cu–phthalocyanine molecules 242 (1991) 544

Solid–electrolyte interface

Y. Kinomoto, S. Watanabe, M. Takahashi and M. Ito, Infrared spectra of CO adsorbed on Pt(100), Pt(111), and Pt(110) electrode surfaces 242 (1991) 538
Y. Sasaki and Y. Nishina, Raman study of a silver electrode in electrolytes with SO_4^{2-} ions 242 (1991) 549

Sulphides

H. Namatame, S. Nohara, H. Negishi, M. Inoue and S. Suga, Inverse photoemission study of transition metal intercalation and surface adsorbed TiS_2 242 (1991) 294

Sulphur

H. Sugahara, M. Oshima, R. Klauser, H. Oigawa and Y. Nannichi, Bonding states of chemisorbed sulfur atoms on GaAs 242 (1991) 335

Surface defects

M.B. Webb, F.K. Men, B.S. Schwartzentruber, R. Kariotis and M.G. Lagally, Surface step configurations under strain: kinetics and step–step interactions 242 (1991) 23
H. Namba, Y. Okawa and H. Kuroda, Rearrangement of surface steps of the Ni(7 9 11) surface by hydrogen adsorption 242 (1991) 32
K. Sumitomo, K.-I. Tanaka, I. Katayama, F. Shoji and K. Oura, TOF–ICISS study of surface damage formed by Ar ion bombardment of Si(100) 242 (1991) 90

Surface diffusion

H. Yasunaga, Hetero-electromigration on semiconductor surfaces 242 (1991) 171
A. Yamanaka and K. Yagi, Surface electromigration of In and Cu on Si(111) surfaces studied by REM 242 (1991) 181
N.-J. Wu, A. Natori and H. Yasunaga, Mass transport of a Ag thin film on a stepped Si(111) surface 242 (1991) 191
A. Natori, S. Ohta and H. Yasunaga, Structural change of a heterogeneous thin film patch by surface electromigration 242 (1991) 195

Surface roughness

G.A. Somorjai, The puzzles of surface science and recent attempts to explain them 242 (1991) 481

Surface states and interface states

T. Yamaguchi and N. Fujima, Electronic states of Si(001) stepped surfaces 242 (1991) 233
Y. Enta, S. Suzuki and S. Kono, Angle-resolved photoemission studies of clean and adsorbed Si(001) surfaces: 2×1, $c(4\times2)$, 2×1–Na and 2×2–Ga 242 (1991) 277
T.U. Kampen, L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314

Surface stress

M.B. Webb, F.K. Men, B.S. Schwartzentruber, R. Kariotis and M.G. Lagally, Surface step configurations under strain: kinetics and step–step interactions 242 (1991) 23
R.J. Needs, M.J. Godfrey and M. Mansfield, Theory of surface stress and surface reconstruction 242 (1991) 215

Surface structure, see also Low energy electron diffraction

T. Urano, Y. Uchida, S. Hongo and T. Kanaji, Structure of the K adsorbed Si(001)2 × 1 surface studied by LEED 242 (1991) 39
T. Takahashi, S. Nakatani, N. Okamoto, T. Ishikawa and S. Kikuta, A study of the Si(111)$\sqrt{3} \times \sqrt{3}$-Ag surface by transmission X-ray diffraction and X-ray diffraction topography 242 (1991) 54
M. Funabashi, T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59
T. Makita, S. Kohmoto and A. Ichimiya, RHEED intensity analysis of Si(001)-2 × 1 and 2 × 1-K surface structures 242 (1991) 65
M. Mitome and K. Takayanagi, The direct observation of the Ge(001) dimer structure by high resolution UHV transmission electron microscopy 242 (1991) 69
J. Kanamori and Y. Sakamoto, Lattice gas model of Si(111) and Ge(111) 242 (1991) 102
Y. Sakamoto and J. Kanamori, The (1 × 1) high temperature phase of Ge(111) and Si(111) 242 (1991) 119
T. Hanada and M. Kawai, Study of successive phase transitions of the Si(001)-Bi surface by RHEED 242 (1991) 137
T. Kawamura and P.A. Maksym, Monte Carlo simulation of single domain Si(100) surfaces 242 (1991) 143
R.J. Needs, M.J. Godfrey and M. Mansfield, Theory of surface stress and surface reconstruction 242 (1991) 215
G.A. Somorjai, The puzzles of surface science and recent attempts to explain them 242 (1991) 481

Surface thermodynamics

M. Kaburagi, T. Tonegawa and K. Ebina, Phase diagram of coadsorbate systems on the square lattice net 242 (1991) 107
Y. Teraoka, Order–disorder transitions in fcc binary alloys with surfaces 242 (1991) 113
A. Inaba, T. Shirakami and H. Chihara, Calorimetric studies of phase transitions in submonolayer physisorbed phases 242 (1991) 202
K. Machida, Magnetic phase transition in adsorbed ^{3}He films 242 (1991) 206
Y. Murakami and H. Suematsu, Magnetic phase transition of oxygen monolayer films adsorbed on exfoliated graphite 242 (1991) 211

Tantalum

T. Kanie, K. Oda, A. Ichimiya, T. Yasue, S. Ohtani and H. Tawara, Secondary electron spectra from a tantalum surface by multiply charged ions 242 (1991) 417

Thermal desorption

M. Hara, K. Domen, T. Onishi, H. Nozoye, C. Nishihara, Y. Kaise and H. Shindo, Formation and desorption of aluminum hydride from hydrogen adsorbed aluminum surfaces 242 (1991) 459
M. Mizuno, H. Kasai and A. Okiji, Thermal desorption of molecules coadsorbed on metal surfaces 242 (1991) 464
T. Matsushima, Spatial distribution of reactive CO_2 desorption on Pt(110)-(1 × 2) surfaces 242 (1991) 489
M. Nishijima, S. Tanaka, N. Takagi and M. Onchi, Chemical reactivity of the Si(100)(2 × 1)-K surface: electron energy loss spectroscopy and thermal desorption studies 242 (1991) 498
Y. Yanagisawa, R. Huzimura, K. Matsumura and S. Yamabe, Oxygen isotope exchange between O_2 adsorbate and UV-irradiated MgO surfaces 242 (1991) 513

Titanium

A. Takano and K. Ueda, A study of the oxygen adsorption process on a titanium single crystal surface by electron stimulated desorption 242 (1991) 450

Tunneling

Ph. Avouris and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1
M. Tsukada, K. Kobayashi and N. Isshiki, Effect of tip atomic and electronic structure on scanning tunneling microscopy/spectroscopy 242 (1991) 12
M. Yoshimura, N. Ara, M. Kageshima, R. Shiota, A. Kawazu, H. Shigekawa, Y. Saito, M. Oshima, H. Mori, H. Yamochi and G. Saito, The surface

structure of an organic conductor $(BEDT\text{-}TTF)_2KHg(SCN)_4$ observed by scanning tunneling microscopy 242 (1991) 18

M.B. Webb, F.K. Men, B.S. Schwartzentruber, R. Kariotis and M.G. Lagally, Surface step configurations under strain: kinetics and step–step interactions 242 (1991) 23

T. Nomura, K. Murakami, K. Ishikawa, M. Miyao, T. Yamaguchi, A. Sasaki and M. Hagino, Structure of GaAs heteroepitaxial layer grown on GaP-(001) by molecular beam epitaxy 242 (1991) 166

Water

Ph. Avouris and I.-W. Lyo, Probing and inducing surface chemistry with the STM: the reactions of Si(111)-7 × 7 with H_2O and O_2 242 (1991) 1

Work function

T.U. Kampen, L. Koenders, K. Smit, M. Rückschloss and W. Mönch, Hydrogen-induced surface acceptors on GaAs(110) surfaces at low temperatures 242 (1991) 314

D. Troost, H.-U. Baier, A. Berger and W. Mönch, Nitride layers on GaAs(110) surfaces 242 (1991) 324

X-ray absorption

M. Funabashi, T. Yokoyama, Y. Takata, T. Ohta, Y. Kitajima and H. Kuroda, Surface structure of Cl/Ni(111) determined by surface EXAFS spectroscopy and soft X-ray standing-wave method 242 (1991) 59

X-ray diffraction

T. Takahashi, S. Nakatani, N. Okamoto, T. Ishikawa and S. Kikuta, A study of the Si(111)$\sqrt{3} \times \sqrt{3}$-Ag surface by transmission X-ray diffraction and X-ray diffraction topography 242 (1991) 54